

CLAIMS

1. Preformed sheet comprising at least two mono-layers, each mono-layer containing unidirectionally oriented fibers having a tensile strength of at least about 1.2 GPa and a tensile modulus of at least 40 GPa, and a binder, with a fibre direction in each mono-layer being rotated with respect to the fibre direction in an adjacent mono-layer, and a separating film on both outer surfaces, characterized in that the separating film has a porosity of between 40 and 90 %.
2. Preformed sheet according to claim 1, wherein the fibres comprise high-performance polyethylene fibres.
3. Preformed sheet according to claim 1 or 2, wherein the binder consists essentially of a thermoplastic elastomer and has a tensile modulus of less than about 40 MPa.
4. Preformed sheet according to any one of claims 1-3, wherein the separating film is made from ultra-high molar mass polyethylene.
5. Preformed sheet according to any one of claims 1-4, wherein the separating film is a biaxially stretched film.
6. Preformed sheet according to any one of claims 1-5, wherein the separating film has an areal density of between 2 and 4 g/m².
7. A preformed sheet according to any one of claims 1-6, wherein the separating film has a strength factor of at least 150 N/m.
8. A preformed sheet according to any one of claims 1-6, comprising two mono-layers of unidirectionally oriented fibres.
9. Assembly of at least two sheets according to any one of claims 1-8, which are not linked to one another.
10. Flexible ballistic-resistant article comprising at least one assembly of claim 9.
11. Flexible ballistic-resistant article comprising an assembly, which contains a plurality of sheets containing at least two mono-layers, each mono-layer consisting essentially of unidirectionally oriented high-performance polyethylene fibres having a tensile strength of at least 1.2 GPa, with the fibre direction in each mono-layer being rotated with respect to the fibre direction in an adjacent mono-layer, and two polyethylene separating films having a porosity of between 40 and 90 % on both outer surfaces, the assembly having an areal density of at least 1.5 kg/m² and a specific energy absorption of at least 300 J.m²/kg as

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measured against a 9x19 mm FMJ Parabellum bullet according to a test procedure based on Stanag 2920.